

WHAT IS CLAIMED IS:

1. A method of manufacturing a semiconductor package, comprising:
 - (a) providing a plurality of semiconductor chips and a wiring substrate, each of said plurality of semiconductor chips having an integrated circuit and bonding pads formed on a main surface thereof, said wiring substrate having a first surface, a second surface opposed to said first surface and a plurality of conductive layers, said wiring substrate having a plurality of chip mounting areas at said first surface in a plane view, said plurality of chip mounting areas being arranged in a matrix formation;
 - (b) mounting said plurality of semiconductor chips on said plurality of chip mounting areas of said first surface of said wiring substrate respectively;
 - (c) electrically connecting said bonding pads of said semiconductor chips with corresponding conductive layers of said plurality of conductive layers, by a plurality of bonding wires;
 - (d) sealing said plurality of semiconductor chips, said plurality of bonding wires and said first surface of said wiring substrate including said plurality of chip mounting areas by a resin member;
 - (e) forming a plurality of bump electrodes on said second surface of said wiring substrate so as to electrically connect with said plurality of conductive layers of said wiring substrate; and
 - (f) after (e), dividing said wiring substrate into plural parts each including a corresponding chip mounting area of said plurality of chip mounting areas, thereby to form a plurality of semiconductor packages each including one of said plural parts of

said wiring substrate, one of said plurality of semiconductor chips, ones of said plurality of bonding wires and a part of said resin member.

2. A method of manufacturing a semiconductor package according to claim 1, wherein said wiring substrate includes a flexible tape substrate.

3. A method of manufacturing a semiconductor package according to claim 2, wherein said flexible tape substrate includes a polyimide tape.

4. A method of manufacturing a semiconductor package according to claim 2, wherein said flexible tape substrate includes a plurality of through holes passing through said flexible tape substrate in a thickness direction, wherein portions of said plurality of conductive layers are arranged to cover said plurality of through holes at said first surface of said wiring substrate, and wherein said plurality of bump electrodes are formed at said plurality of through holes so as to contact with said portions of said plurality of conductive layers.

5. A method of manufacturing a semiconductor package according to claim 4, wherein said plurality of bump electrodes are solder bump electrodes.

6. A method of manufacturing a semiconductor package according to claim 1, wherein (b) includes fixing each of said plurality of semiconductor chips on said first surface of said wiring substrate by an insulating adhesive layer respectively.

7. A method of manufacturing a semiconductor package, comprising:

- (a) providing a plurality of semiconductor chips and a wiring substrate, each of said plurality of semiconductor chips having an integrated circuit and bonding pads formed on a main surface thereof, said wiring substrate having a first surface, a second surface opposed to said first surface and a plurality of conductive layers;
- (b) mounting said plurality of semiconductor chips on said first surface of said wiring substrate such that plural number of semiconductor chips are arranged in both of longitudinal and transverse directions;
- (c) electrically connecting said bonding pads of said semiconductor chips with corresponding conductive layers of said plurality of conductive layers, by a plurality of bonding wires;
- (d) sealing said plurality of semiconductor chips, said plurality of bonding wires and said first surface of said wiring substrate by a resin member;
- (e) forming a plurality of bump electrodes on said second surface of said wiring substrate so as to electrically connect with said plurality of conductive layers of said wiring substrate; and
- (f) after (e), cutting said wiring substrate at a position between adjacent semiconductor chips to divide said wiring substrate into plural parts, thereby to form a plurality of semiconductor packages each including one of said plural parts of said wiring substrate, one of said plurality of semiconductor chips, ones of said plurality of bonding wires and a part of said resin member.